**Homework 3 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Distance and Absolute Value Period: \_\_\_\_\_\_\_\_Advisor:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Failure to show work on all problems will result in a LaSalle.**

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| --- | --- |
| Use the number line below to answer questions 1 – 4. | |
| 1. What is the distance, in coordinate units, between points *A* and *B*? | 2. What is the distance, in coordinate units, between points *B* and *E*? |
| 3. How much longer is *AD* than *BE*? | 4. How much longer is *CD* than *DE*? |
| Use the description of a number line below to answer questions 5 – 6. Sketch the number line below before answering the questions.  *On a number line, point W is located at 3, X is located at –5, Y is located at –16, and Z is located at 11.* | |
| 5. What is the distance, in coordinate units, between points *W* and *Z*? | 6. What is the distance, in coordinate units, between points *Y* and *Z*? |
| 7. How much longer is *WY* than *XZ*? | 8. How much longer is *YZ* than *WX*? |

**Mixed Review**

Rewrite the equation so that it is in *y = mx + b* form.

|  |  |
| --- | --- |
| 1) | 2) |
| 3) | 4) |

Determine the slope of the line by rearranging the equation into *y = mx + b* form.

|  |  |
| --- | --- |
| 5)    m = \_\_\_\_\_\_ | 6)    m = \_\_\_\_\_\_ |
| 7)    m = \_\_\_\_\_\_ | 8)    m = \_\_\_\_\_\_ |

Determine the slope of the line using the slope formula.

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| 9) | 10) |
| 11) | 12) |